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| 09/989,866 | 11/19/2001 | Yoshitoshi Kurose | FUJO19.189 | 2344 |

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| EXAMINER |
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JOO, JOSHUA

| ART UNIT | PAPER NUMBER |
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2154

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,866

Applicant(s)

KUROSE ET AL.

Examiner

Joshua Joo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/26/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 1-15 are presented for examination.
2. Claims 1-15 are rejected.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 6, and 11 are rejected under 35 U.S.C. 102(e) as being unpatentable by Baugher et al, US Patent #6,101,549 (Baugher hereinafter).

5. As per claims 1, 6, and 11, Baugher teaches the invention as claimed including a method, apparatus, and medium to relay service request messages to a second device on behalf of a first device. Baugher's teachings comprise of:

a network information collecting section for obtaining information about a network service provided by the first device (Col 5, lines 29-38. Proxy host receives information regarding requested service and the parameters of the requested service. Col 2, lines 39-41. Hosts are used to implement proxy control of resource reservation.);

a setting device determining section for specifying the second device which does not respond to the network service based on information from the network information collecting section (Col 5, lines 44-49. Proxy host sends RESV or PATH messages on behalf of hosts. Col

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1, lines 25-39. Proxy host makes bandwidth requests because hosts may not be configured to run bandwidth reservation protocol.);

a service mapping section for mapping network service parameters to be set into parameter values of the second device specified by the setting device determining section (Col 5, lines 29-39. Receives parameters for requested service. Col 5, lines 44-49. Makes service request to the host.); and

a service setting section for setting the parameter values obtained by the service mapping section in the second device (Col 5, lines 44-49. Proxy host sends RESV or PATH messages on behalf of hosts.); which

performs control of the network service parameters of the second device that does not correspond to the network service by the first device, according to the service requested by the first device (Col 5, lines 44-49. Proxy host sends RESV or PATH messages on behalf of hosts. Col 3, lines 31-35. Messages contain information required by host to allow for bandwidth reservation requests.).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4, 8, 9, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher in view of Livanos, US Patent #5,068,892.

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8. As per claims 3, 8, and 13, Baugher teaches of using a proxy host to generate a bandwidth request for routing services. However, Baugher does not teach of a service allocating device according to claim 1, further comprising:

a priority route selecting section selecting device for providing a higher function of a requested network service, of the first and second devices which are connected to the network, and determining a communications route through which the selected devices are connected and

a route comparison section comparing a communications route used prior to a new network service request with a communications route determined by the priority route selecting section.

9. Livanos teaches of network management, where a node compares the identity of alternate routes in the network with the identity of previously tried alternate routes (Col 8, lines 24-28). If there is no alternate route or no alternate route which has not been tried, the node may provide backup route. The backup route test allows for special treatment for certain high priority call types (Col 8, lines 35-46). The nodes have processors associated with memory (Col 4, lines 14-25; Col 4, lines 54-56).

10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baugher and Livanos because the teachings of Livanos to compared prior used routes and using a secondary route if alternate routes aren't available would improve the quality of service of Baugher's teachings by providing a route with sufficient bandwidth to establish a connection in real time.

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11. As per claims 4, 9, and 14, Baugher teaches of using a proxy host to generate a bandwidth request for routing services. Baugher does not teach the service allocating device according to claim 3, further comprising

a route setting generating section determining a communications route suitable for provision of the new network service based on a comparison result obtained by the route comparison section, which performs control so that the new network service can be provided, using a communications route determined by the route setting generating section.

12. Livanos teaches of network management, where a node determines whether or not communication route is available for a call service. If the route is available, a call is allowed to complete (Col 7, lines 10-17). The determination is made by comparing previously tried alternate routes (Col 8, lines 24-29). If there is no alternate route or no alternate route which has not been tried, the node may provide backup route. The backup route test allows for special treatment for certain high priority call types (Col 8, lines 35-46). The nodes have processors associated with memory (Col 4, lines 14-25; Col 4, lines 54-56).

13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baugher and Livanos because the teachings of Livanos to determine an available route based on comparison of other routes would improve the quality of service of Baugher's teachings by providing the optimal real time path available for the connection and by avoiding routes with network congestion.

14. Claims 2, 5, 7, 10, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher in view of Bertin et al, US Patent #5,687,167 (Bertin hereinafter).

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15. As per claims 2, 7, and 12, Baugher teaches of using a proxy host to make connection requests for bandwidth reservations. However, Baugher does not teach the service allocating device according to claim 1, further comprising:

a service setting storing section storing setting contents of the first and second devices, which respond to previous network services, and

a service competition calculating section checking a competition relation between network service requests from a plurality of users based on information stored in the service setting storing location, adjusting the competition relation, and determining the setting contents of the first and second devices so as to respond to the network service to be provided.

16. Bertin teaches of providing reservation of bandwidth to connections with higher priority. The origin node sends a bandwidth request to the transit nodes along the path of the connection, and each nodes responds with its current status (Col 13, lines 30-36). The router compares the priority status of the requested connection with the priority status of the established connections to determine which connection holds the priority. If the requested connection holds the higher priority, the previous connection might be terminated and might try to reestablish the connection on a new route. The transmit nodes keeps complete information about each connection (Col 13, line 64 -Col 14, lines 37). If the Path Selection process is unable to find a path without stopping the services, the reserved bandwidth of the lower groups may be terminated or the bandwidth of the lower group maybe adjusted (Col 17, lines 15-32).

17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baugher and Bertin because both teachings deal with providing reservation of bandwidth to ensure a stable network connection. Furthermore, the teachings of Bertin to compare the priorities of connections and to provide bandwidth to a

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connection with a higher priority would improve the quality of service of Baugher's teachings because information such as voice packets carry real-time information and should be sent ahead of data packets to prevent delay in transmission.

18. As per claims 5, 10, and 15, Baugher does not teach of the service allocating device according to claim 2, further comprising:

a service stoppage request generating section obtaining information about a network service provision state of the first device, detecting provision stoppage of a network service by the first device based on the network service provision state information, and generating a service stoppage request,

a service setting storing section storing a plurality of setting information to the first and second devices, which correspond to a network service that existed before provision stoppage of the network service is detected, and

a service competition calculating section calculating a service competition relation that is modified by the detected provision stoppage of the network service according to both the service stoppage request and storage information of the service setting storing section.

19. Bertin teaches an invention for providing reservation of bandwidth to connections with higher priority. Bertin teaches of requesting priority of a new connection, in which if the priority level of the new request is higher than the existing connection, the service for the existing connection is stopped, which causes the lower priority connections to release the reserved bandwidth. The transit nodes store the complete information of the connections, and network connections that are preempted will attempt to reestablish connections on a new route. Network connections that have ended will attempt to reestablish themselves on a new route that avoids the busy links (Col 14, lines 1-36). The origin node communicates with the transit nodes

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to establish reservation along the link, and it receives responds from the transit nodes about their status (Col 13, lines 30-47).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baugher and Bertin because both teachings deal with providing reservation of bandwidth to ensure a stable network connection. Furthermore, the teachings of Bertin to stop a previous connection with lower priority, to compare the relationship of the request, and to determine a service to be modified would improve the efficiency of Baugher's teachings by providing the best possible paths to accommodate connections of higher priority regardless of the orders of the established connection.

Response to Arguments

21. Applicant's arguments filed 4/26/2005 have been fully considered but they are not persuasive.

22. Applicant argued that (1) the proxy server of Baugher does not discuss means for making a reservation of a relaying router resource and claim 1 enables one of the end-hosts to reserve a resource belonging to another of the end-hosts even if an associated network includes relaying router that does not respond to RSVP; (2) the configuration according to claim 3 for identifying and distinguishing respective routers of which some are responsive to a request from an end host such as an RSVP and capable of reserving resources of themselves independently, while others are not responsive to such a request, rely on a management server that exercise control over the router resources is not disclosed by either Baugher or Levanos; and (3) Bertin or by any combination with Baugher and Livanos does not teach or anticipate a

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heterogeneous network that contain nodes that function in different resource reservation methods.

Examiner traverses the argument:

23. As to point (1), there is no indication of a router that does not respond to RSVP in Applicant's claim. Baugher teaches the means for making a reservation of a device, and does not need to specifically teach that the devices need to be routers. It is noted that the features upon which applicant relies (i.e., routers and routers that do not respond to RSVP) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

24. As to point (2), In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., routers that are responsive and nonresponsive to requests) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

25. As to point (3), Baugher teaches of using a third host (proxy) to make bandwidth requests on behalf of a sending or receiving host for various reasons (Col 1, lines 25-30), including because of a network where some hosts may be not configured to run the bandwidth reservation protocol (Col 1, lines 34-37). Thus, Baugher teaches of a network that contain nodes, e.g., hosts, that function in different reservation methods.

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

27. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is (571) 272-3966. The examiner can normally be reached on Monday to Friday 7 to 4.


29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 13, 2005

JJ

 **JOHN FOLLANSBEE**
SUPERVISORY PATENT EXAMINER
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